REMARKS

As a preliminary matter, Applicants thank the Examiner for the courtesy shown to Patrick G. Burns and Josh C. Snider in the personal interview conducted October 10, 2001. Independent claim 150 has been amended along the lines suggested by the Examiner in the interview.

As a second preliminary matter, Applicants thank the Examiner for the clarification by telephone on October 22, 2001, of errors and omissions in the outstanding Office Action (Paper No. 9). For the purposes of this Response, Applicants understand that "15" on page 3, line 11 (item #5), was meant to read as "155," and that claims 156, 159, 162, and 169 were meant to be withdrawn by the Examiner from further consideration.

As a third preliminary matter, with regard to the drawings, Applicants have included herewith marked-up copies of the drawings, with the proposed changes in red. The changes reflect changes made to drawings in related Applications. Approval of the proposed drawing changes is respectfully requested.

The drawings otherwise stand objected to under 37 CFR 1.83(a). Applicants respectfully traverse. Applicants submit that the features cited by the Examiner in the objection are shown in FIG. 42 of the present Application.

Claims 150-153 and 164-165 stand rejected under 35 U.S.C. 102(b) as being anticipated by Koma (U.S. 5,608,556). Applicants respectfully traverse this rejection

because the cited reference does not disclose (or suggest) parallel line portions within one pixel as domain regulating means, which are features of claim 150 of the present invention, as amended.

Koma discloses a liquid crystal display having two substrates 10, 30, and a plurality of display electrodes 17. Within the area of each display electrode 17, an orientation control electrode 22 is located on one substrate, and an X-shaped orientation control window 33 is located on the other substrate. The electrode 22 and window 33 are used as domain regulating means, and those skilled in the art are apprised that this orientation control electrode/window structure and method are known as "in-plane switching," or IPS. No more than one electrode 22 or window 33 exist for each display electrode 17.

In contrast, claim 150 of the present invention as amended recites, among other things, first and second line portions extending in different directions, with the first line portions arranged approximately parallel to each other. This recited structure of the present invention is a different technology from the IPS technology taught by Koma. Although Applicants do not agree that the Examiner's rejection based solely on Koma is proper, or that the present invention reads on Koma, Applicants have amended independent claim 150 in order to expedite prosecution. Claim 150 now also recites that a plurality of the first line portions exist within one pixel. Koma does not disclose or suggest such a feature.

Even if the Examiner's assertion was correct, that Koma's single control window can be broadly interpreted to show first and second line portions, arranged parallel

to other control windows, Koma teaches that only one control window is used for each display electrode, or pixel. In other words, Koma teaches that there could be no plurality of parallel line portions as domain regulating means within a single pixel. For at least these reasons, the rejection of claim 150 based on Koma is respectfully traversed.

Claims 151-153 and 164-165 all depend either directly or indirectly from independent claim 150, and therefore include all of the features of the base claim, plus additional features. Accordingly, for at least the reasons discussed above in traversing the rejection of independent claim 150, the rejection of claims 151-153 and 164-165 based on Koma is also respectfully traversed.

Claims 150-155, 157-158, 160-161, and 163-168 stand rejected under 35 U.S.C. 102(b) as being anticipated by Hirata et al. (U.S. 5,953,093). Applicants respectfully traverse this rejection because the cited reference does not disclose (or suggest) a liquid crystal display showing vertically-aligned crystals, which is a feature of claim 150 of the present invention, as amended.

Hirata discloses a liquid crystal display utilizing twisted nematic ("TN") technology. One skilled in the art is apprised that TN devices do not include liquid crystals exhibiting vertical alignment ("VA"). The Examiner correctly acknowledged this fact in the October 10, 2001, interview. Claim 150 of the present invention as amended specifically recites, among other things, a liquid crystal having negative dielectric constant anisotropy. The Examiner further acknowledged that "negative dielectric constant anisotropy" refers to

VA liquid crystals. Hirata's TN device neither discloses nor suggests this recited feature of the present invention. For at least these reasons, the rejection of claim 150 based on Hirata is respectfully traversed.

Claims 151-155, 157-158, 160-161, and 163-168 all depend either directly or indirectly from independent claim 150, and therefore include all of the features of the base claim, plus additional features. Accordingly, for at least the reasons discussed above in traversing the rejection of independent claim 150, the rejection of claims 157-158, 160-161, and 163-168 based on Hirata is also respectfully traversed.

Attached hereto is a marked-up version of the changes made to the specification and claims by the current amendment. The attached Appendix is captioned **"Version with markings to show changes made."**

For all of the foregoing reasons, Applicants submit that this Application, including claims 150-169, is in condition for allowance, which is respectfully requested. The Examiner is invited to contact the undersigned attorney if a further interview would expedite prosecution.

Respectfully submitted,
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VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE SPECIFICATION:

The paragraph beginning on Page 167, line 8, has been amended as follows:

First, the optical retardation film used in the device of the present invention will be described hereinbelow by referring to Fig. 216. As illustrated in Fig. 216, let n_x and n_y designate [dielectric constantes] inplane refractive indices (or indices) respectively corresponding to inplane directions defined in a surface of the film. Further, let n_z denote a [dielectric constant] refractive index in the direction of thickness thereof. The following relation among the [dielectric constantes] refractive indices n_x, n_y and n_z holds in the phase difference film to be used in the device of the present invention: $n_x, n_y \geq n_z$.

The paragraph beginning on Page 167, line 19, has been amended as follows:

Incidentally, an optical retardation film in which the following relation holds: $n_x, \rangle n_y = n_z$, has optically positive uniaxiality therein. Hereunder, such a phase difference film will be referred to simply as a positive uniaxial film. Axis extending in a direction corresponding to a larger one of the [dielectric constantes] inplane refractive indices n_x and n_y is referred to as a phase lag axis. In this case, $n_x \rangle n_y$. Therefore, the axis extending in the x-direction is referred to as the phase lag axis. Let d designate the

thickness of the film. When light passes through this positive uniaxial film, the following phase difference (or optical retardation) R is caused in an inplane direction: $R = (n_x - n_y)d$. Hereinafter, the "phase difference caused by the positive uniaxial film" indicates a phase difference caused in an inplane direction.

IN THE CLAIMS:

Claim 150 has been amended as follows:

150. (Amended) A liquid crystal display device for controlling light transmission by a birefringement effect of a liquid crystal which occurs when a voltage is applied to the liquid crystal, comprising:

a first substrate and a second substrate for sandwiching a liquid crystal having a negative dielectric constant anisotropy; and

domain regulating means for regulating azimuths of orientations of said liquid crystal when a voltage is applied to said liquid crystal,

wherein when vertically seen to the substrates, said domain regulating means including first line portions and second line portions, said first line portions being extended in a first direction, said second line portions being extended in a second direction different from said first direction, a plurality of said first line portions existing in one pixel, and neighboring ones of said first line portions being arranged approximately parallel to each other.